



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/607,883	06/27/2003	Thomas J. Harris	20020331.ORI	7224
23595	7590	06/28/2005	EXAMINER	
NIKOLAI & MERSEREAU, P.A. 900 SECOND AVENUE SOUTH SUITE 820 MINNEAPOLIS, MN 55402			SOOHOO, TONY GLEN	
			ART UNIT	PAPER NUMBER
			1723	

DATE MAILED: 06/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/607,883

Applicant(s)

HARRIS ET AL.

Examiner

Tony G. Soohoo

Art Unit

1723

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 June 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-12, 14 and 17-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-12, 14 and 17-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 2-12, 14, 17-21 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Accordingly, it is deemed that the amendment(s) has introduced new matter into the specification and claims.

A. The specification fails to limit and describe the vessel as a "marine" vessel. There is only basis for the following terms "watercraft" or "vessel" or "barge" or vessel or craft in cooperation in the body of water with a water line. There is no basis for the modifying term "marine" to the object of a vessel or craft, nor is there any basis for a contemplated distinction involving the term "marine" with any tethered barge. Any arguments to hinge a patentable distinction from the prior art with regards to a particular interpretation of the specific adjective term "marine", as a modifier to the noun "vessel", is deemed as being without original support in the original specification.

B. The specification also fails to teach the mounting system of the cement plant as being "permanent mounted". Original basis provided in the original specification is

Art Unit: 1723

only states a "barge-mounted concrete mixing". There is no basis to the permanence of the mounting means nor a discussion to the particular operation of the mount structure to the barge itself.

Claim interpretation

With regards to the preamble "a marine vessel mounted [device]" such as recitation is directed to the functional environment of the concrete mixing and delivery system. The phrase has been afforded little patentable distinction to a "marine" function, and has been read that the device is to be operable in an environment whereby it is able to float in water above a water line. No distinction has been made to the phrase as to an interpretation that "marine" is a negative limitation an structure of a watercraft which it must operate without any coupling or connection by a rope or line to the shore.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2-5, 7, 11-12, 14, 17-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Doherty 4792234 in view of Malan 3845631, or alternately Doherty 4792234 in view of Maxon Jr.3151849.

Art Unit: 1723

Doherty teaches a concrete mixing and delivery system and method of operation in which the mixing plant which is mounted upon a moveable frame 20, 32, 30 which is capable to be functionally mounted on any surface, including that of a ship, barge, roadway, trailer. In this case, the Doherty mixing and delivery system is permanently mounted on a movable frame of a portable trailer bed 20.

The concrete mixing plant and delivery system includes:

- a) two opposed rotary mixing drums 78, 78 and
- b) a common conveyor 66, 98 which elevates the material which may be dumped to a location at 160 away off of the frame and support holding the concrete plant so as to dispense the concrete to another place off of the support frame.

Doherty also teaches a control system 184 which may control any of the operation of the elements of the device.

The reference teaches a rotating discharge diverting chute 82 which is selectively connectable to the each drum 78, 78 by pivoting along 152 to the mouth 146 of a drum; a collection pan 70, 95, 96, 124,, located above the conveyor belt 66, 98, a water supply storage tank 154.

With regards to claim 7 the operation of the chute system "being capable" is functional in recitation and has not been provided patentable distinction to the claim.

Doherty discloses all of the recited subject matter as defined within the scope of the claims with the exception of having the mixer/delivery system permanently attached upon a vessel, (claims 1 and 20) in particular a barge vessel (claim 14).

Art Unit: 1723

In a first example of a cement plant device and method, the Malan reference discloses that a movable floating platform 18 may be provided with a mounted cement mixer plant with a mixer 27 (particular type unstated) and with a discharge chute 28 feeding concrete conveyor 35, 40, 45, and also may feed into optionally a spout 43, fig 3. so that on provide the capability to form cement material offshore to be dispensed off the floating vessel. Note that the cement mixer does not move off the platform but the platform may float upon the water.

Alternately, in a second example, the reference to Maxon, Jr teaches also teaches a concrete mixing plant, including a mixing drum 12, cement bin 13 and conveyor 14, and power plant 15 which is permanently mounted in a moveable chassis 4. Maxon further teaches that although it is mounted on a road vehicle frame, it may be mounted on a barge for river and harbor work. See column 1, lines 9-16, especially line 15-16, and lines 30, and lines 57-62, especially lines 61-62.

Accordingly, in view of the showing of Malan that one may place the concrete plant on a floating vessel and configure the dispensing conveyors to dispense off the vessel that one may mount a concrete plant on a vehicle frame or a barge, it is deemed that it would have been obvious to one of ordinary skill in the art to substitute the transportable support frame of the cement plant system of Doherty with a watercraft as the support frame which is cement plant system is permanently mounted upon, thus Doherty's cement plant may remain as a portable plant, but may be transported upon the surface of the water, instead of a road surface, thereby presenting a cement plant system permanently mounted upon a floating vessel, or barge so as to provide a

Art Unit: 1723

manner to make cement upon the water surface and to easily place cement along the water shoreline. It is also noted that it is old and well known to secure machine devices to a ship platform so that the devices would not fall off of the ship and become submerged into the water.

Alternately, in view of the teaching by the Maxon, Jr. reference that a road vehicle frame with a mounted cement mixing plant may also be mounted on a barge so as to permit the plant to be transported upon waterways or rivers, it is deemed that it would have been obvious to one of ordinary skill in the art to substitute the transportable support frame of the cement plant system of Doherty with a the system being permanently mounted on the support frame of a barge so as to provide a manner to make cement upon the water surface and to easily place cement along the water shoreline, and to provide a secure permanent attachment of the cement plant onto the floating platform so that the plant would not fall off of the platform into the water.

With regards to claims 18-19, the use of propulsion systems upon a floating platform is old and well known, in order to provide a means to move the floating platform to a desired location in the water. Accordingly, it is deemed that it would have been obvious to one of ordinary skill in the art to provide for the device as modified above with a propulsion system upon the frame so as to easily move the platform from one location in the water to another location.

With regards to the manner of the drums are off loaded, absent any unexpected results in the sequence of drum discharge, such an operation is deemed that it would

Art Unit: 1723

have been obvious to one of ordinary skill in the art to optimize discharge rate of each the drums so that production of the material is optimized.

5. Claims 6 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Doherty 4792234 in view of Malan 3845631 or alternately Doherty in view of Maxon Jr. 3151849 as applied to claim 2 above, and further in view of Farrell 2319807.

With regards to claims 7 and 9 Doherty as modified above discloses all of the recited subject matter as defined within the scope of the claims with the exception of having the conveyor includes a 1st and 2nd conveyor whereby the 2nd conveyor is an elevated mechanized output chute.

The reference to Farrell teaches that concrete mixer drum 19, 20 may be conveyed up a conveyor to an elevate discharge chute 67 for a batch discharge.

Also, has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

Accordingly, it is deemed that it would have been obvious to one of ordinary skill in the art to provide two conveyor systems so that conveyance path is of a more convenient routing, and further provide the second conveyor as a elevated batch discharge chute as the type taught by Farrell, so that the discharge of the cement may be more conveniently discharged in a batch manner.

Art Unit: 1723

6. Claims 8 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Doherty 4792234 as modified above in each of the alternate rejection as applied to claims 7 and 9 above, and further in view of John 5522658.

With regards to claims 8 and 10, Doherty 4792234 as modified above in each of the alternate combinations as applied to claim 2 above, and further in view of Farrell 2319807 discloses all of the recited subject matter as defined within the scope of the claims with the exception of the use of a sump collection to collect gray water for reuse, i.e. recycling the water.

The recycling of water in the cement processing art is old and well known as shown by John 5522658, column 5 lines 5-8, which uses a sump to collect used water in a cement process for reuse thereby providing advantageous environmental consideration and impact.

Accordingly, it is deemed that it would have been obvious to one of ordinary skill in the art to provide a sump at the bottom of the collection pan 70, 95, 96, 124 and discharge chute of Doherty so as to collect and recycle any water used in the process so as to reduce unwanted the environmental impact.

Response to Arguments

7. Applicant's arguments filed 6-14-2005 have been fully considered but they are not persuasive.

8. Applicant argues, on page 6, that the term "marine" vessel has basis in the specification since the specification refers to "watercraft or vessel" and "integrated

Art Unit: 1723

barge- mounted mixing and delivery system". Applicant further notes that there are many instances which applicant indicates that "a movable floating or on-water system is contemplated".

9. In response, the examiner notes that applicant has failed to pointed out where in the original specification where it has defined the word "marine". Basis for interpretation of this modifier term is the crux of Applicant's further arguments for patentable distinction from that of the Malan '631 reference whereby it discusses a distinction of a "marine" vessel from that of the floating watercraft of Malan. See applicant's arguments on page 7, last line, "The Malan device is clearly tethered and not suitable for operation as a marine vessel ". Should one generously accept of applicant's argument for context and meaning of the term "marine" as discussed on page 6, the meaning of "marine" must equate to a watercraft or barge and it is noted that the Malan reference clearly floats upon the water and is a platform upon the water surface which may provide water transport. The Malan '631 reference floats on the surface of the water and may be operated to transport the cement plant system from shore to dam or any point along the surface of the water.

10. Applicant argues, on page 7, that the combination of the portable system Doherty '631 would be unstable on the deck of the barge of the marine vessel, and permanent placement of the Doherty reference on the deck of a watercraft "would destroy its capability of being moved way from a give installation site".

11. In response, the rejection points out the mounting of the cement plant upon the watercraft instead of a trailer frame bed. This is in distinction to applicant's

Art Unit: 1723

interpretation to merely place the entire Doherty wheeled trailer/cement plant upon a barge deck.

12. With regards applicant's argument that Doherty's cement plant may not be portable. Applicant is reminded that the water craft itself has the capability of being moved from site to site. Also a fixed installation of the cement plant components upon the deck of a water craft does not inhibit or destroy the capability of its operation to make, mix and deliver cement. Thus applicant's argument with regards to Doherty is unpersuasive.

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following references disclose ship mounted cement plants: JP 2001-269925, JP 11-115882, JP 2000-345544 and JP 2-178417 and Rail et al 4266889.

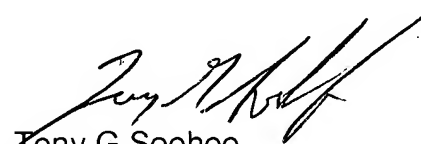
14. The following U.S. patents disclose dual drum mixers: Oberg et al 5605397, and Suarez 5755541.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tony G. Soohoo whose telephone number is (571) 272 1147. The examiner can normally be reached on 7:00 AM - 5:00 PM, Tues. - Fri..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda Walker can be reached on 571-272-1151. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

- Art Unit: 1723

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Tony G Soohoo
Primary Examiner
Art Unit 1723
